

SHEET INDEX	
1.	SITE DEVELOPMENT AND GRADING & SEDIMENT CONTROL PLAN
2.	SEDIMENT CONTROL NOTES AND DETAILS & TOT LOT LAYOUT PLAN

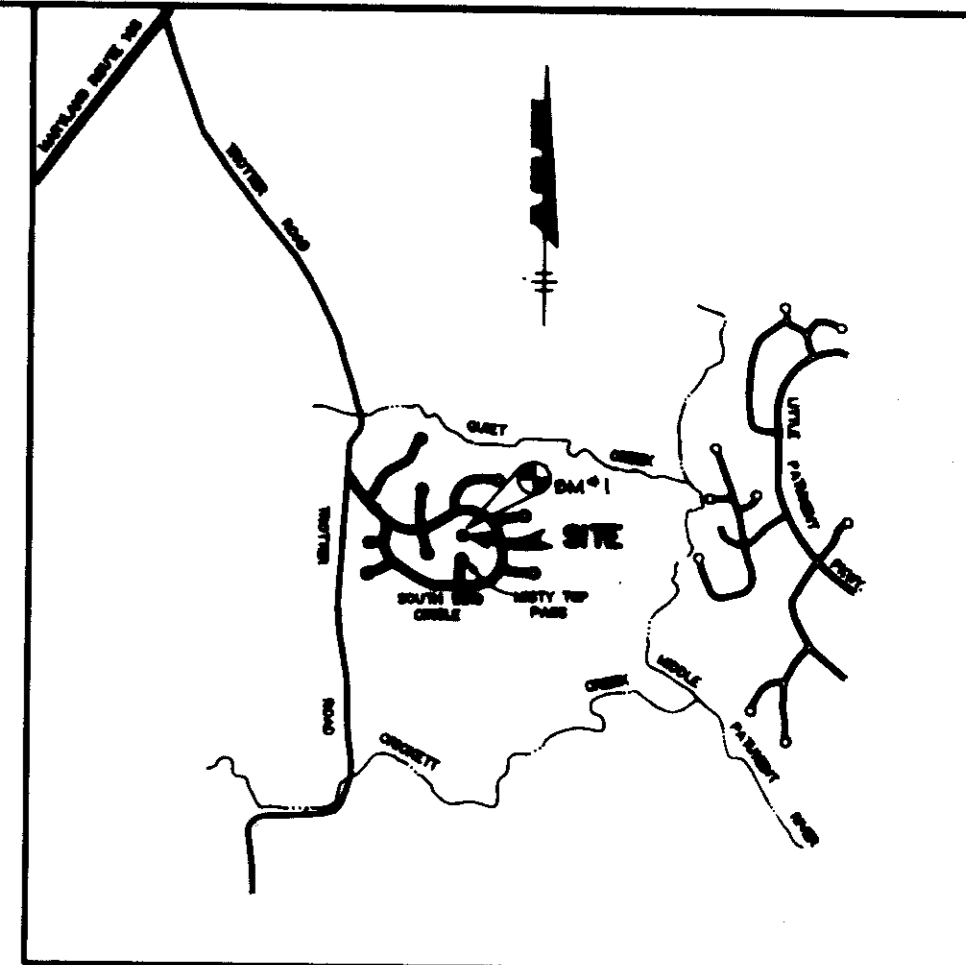
LEGEND

- LIMIT OF DISTURBANCE
- 398--- EXISTING CONTOUR
- 396--- PROPOSED CONTOUR
- S---S--- SILT FENCE
- ~~~~~ EXISTING TREELINE

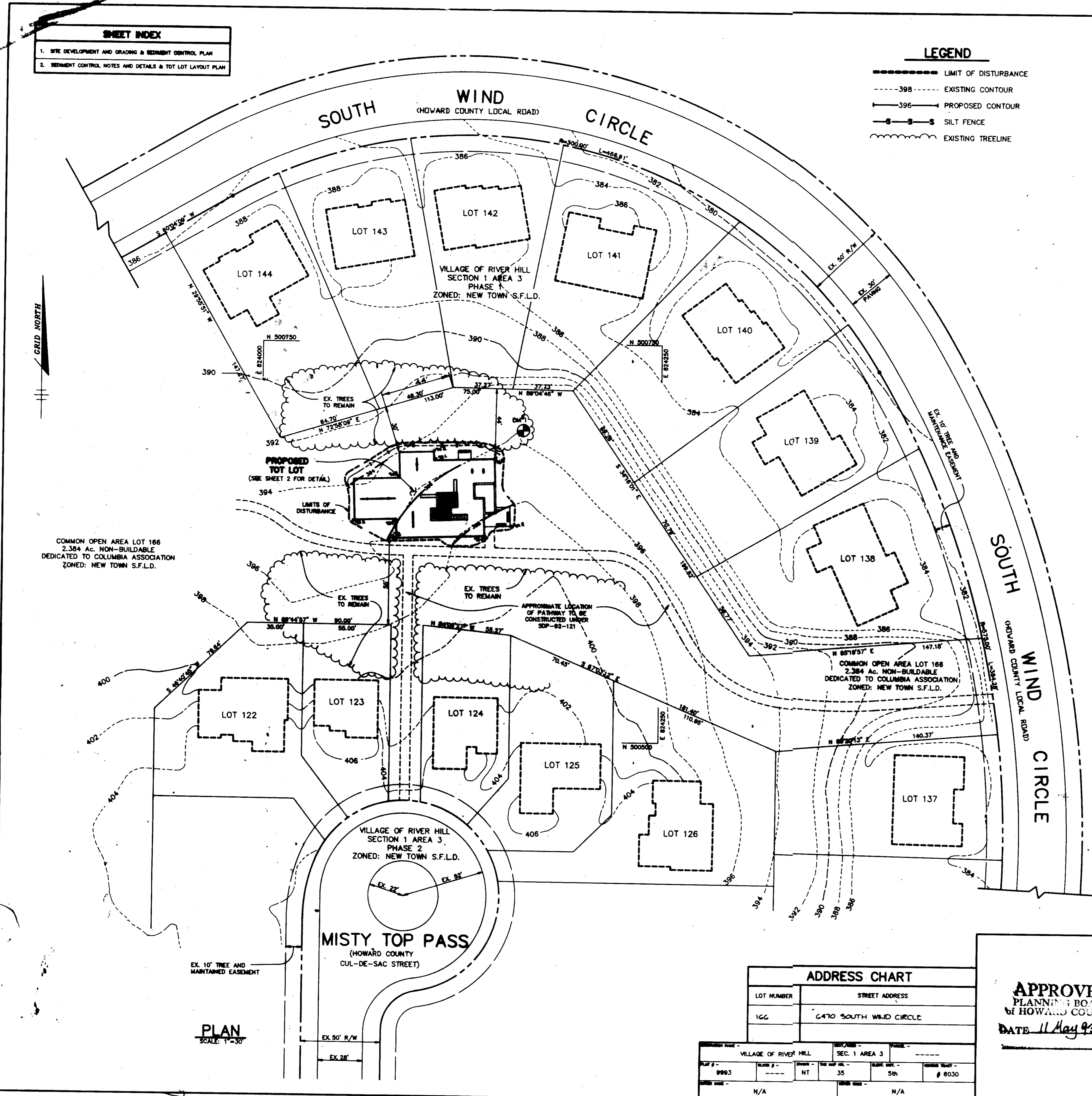
GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (3) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

MES UTILITY	1-800-237-7777
CMP TELEPHONE COMPANY	725-9978
HOWARD COUNTY BUREAU OF UTILITIES	313-4900
AT&T CABLE LOCATION DIVISION	383-3683
BALTIMORE GAS & ELECTRIC COMPANY	686-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION	515-1660
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED JAN. 1993 BY RIEMER MUEGGE AND ASSOCIATES, INC.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DRAINAGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.



VICINITY MAP
SCALE: 1"=2000'



COMMON OPEN AREA LOT 166
2.384 AC. NON-BUILDABLE
DEDICATED TO COLUMBIA ASSOCIATION
ZONED: NEW TOWN S.F.L.D.

PROPOSED TOT LOT
(SEE SHEET 2 FOR DETAIL)

APPROXIMATE LOCATION OF PATHWAY TO BE CONSTRUCTED UNDER
30P-92-121

COMMON OPEN AREA LOT 166
2.384 AC. NON-BUILDABLE
DEDICATED TO COLUMBIA ASSOCIATION
ZONED: NEW TOWN S.F.L.D.

SITE ANALYSIS	
TOTAL AREA =	2.384 ACRES; 103,847 SQ. FT.
ZONED:	NEW TOWN S.F.L.D.
PROPOSED USE OF STRUCTURE(S) - TOT LOT	
OPEN SPACE (GREEN AREA) TO REMAIN ON SITE:	2.384 AC.

BENCHMARK	
B.M. 1	ELEV. 508.90
R.R. OFFICE SET IN 10' WILD CHERRY TREE @ N.E. END OF HEDGEROW.	
N	5006.04 02
E	024102.07

AS BUILT CERTIFICATE	
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>Joyce M. Bruden</i>	8-25-93
COUNTY HEALTH OFFICER	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Daniel J. D'Angelo</i>	8/23/93
DIRECTOR	DATE
<i>Olga Surinman</i>	8/27/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	
<i>John M. Payne</i>	8/24/93
DIRECTOR	DATE
<i>Robert Anderson Calva</i>	8/20/93
CHIEF, BUREAU OF ENGINEERING M.C. 00 0103	DATE

BY THE DEVELOPER:	
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.	
DEVELOPER	<i>Dennis Ellis</i> 5-26-93 DATE
BY THE ENGINEER:	
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.	
ENGINEER	<i>Arthur E. Muegge</i> 6-1-93 DATE

DATE	NO.	REVISION
OWNER / DEVELOPER		
COLUMBIA ASSOCIATION 10221 WINCOPIN CIRCLE COLUMBIA, MARYLAND 21044		
PROJECT		
PHEASANT RIDGE TOT LOT		
AREA		
TAX MAP 35 VILLAGE OF RIVER HILL SECTION 1 AREA 3 PHASE 1 LOT 166 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
SITE DEVELOPMENT AND GRADING & SEDIMENT CONTROL PLAN		
RIEMER MUEGGE & ASSOCIATES, INC. Professional Engineers & Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9282		

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
166	6470 SOUTH WIND CIRCLE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 11 May 93

VILLAGE OF RIVER HILL		SEC. 1 AREA 3	
PLAT #	9993	BLK. #	NT
BLK. #	35	LOT #	5th
OWNER	N/A	OWNER	N/A

6-1-93 DATE

F-81-98, PDPPHASE 210, SDP-12-141

DESIGNED BY: D.B.S.

DRAWN BY: D.B.S.

PROJECT NO: 89800

DATE: MARCH 19, 1993

SCALE: AS SHOWN

DRAWING NO. 1 OF 2

ARTHUR E. MUEGGE 88707

SDP 93-93

PERMANENT SEEDING

Seedbed Preparation: Flat areas and slopes up to 3:1 slope shall be loose and friable to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, disking or other acceptable means before seeding. Slopes steeper than 3:1 shall have the top 1 to 3 inches of soil loose and friable before seeding.

Soil Amendments: Use one of the following schedules.

Lime and fertilizer according to soil tests. Lime and fertilizer needs can be determined by a soil testing laboratory, such as the University of Maryland's Soil Testing Laboratory.

In lieu of soil test results, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 LBS/1000 SF) and 800 LBS per acre 10-10-10 fertilizer (14 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 LBS per acre 30-0-0 ureaform fertilizer (01 LBS/1000 SF)
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 LBS/1000 SF) and 1000 LBS per acre 10-10-10 fertilizer (23 LBS/1000 SF) before seeding. Harrow or disc into upper three inches of soil.

On slopes steeper than 3:1 slope, the lime and fertilizer shall be worked the best way possible. On sloping land, the final harrowing or disking operation should be on the contour wherever feasible. No attempt should be made to drag any disced area to make the soil surface smooth after disking.

Seeding:

For the periods March 1 thru April 30, and August 1 thru October 15. Seed with 80 LBS per acre (1.4 LBS/1000 SF) of Kentucky 31 Tall Fescue.

For the period May 1 thru July 31.

Seed with 80 LBS Kentucky 31 Tall Fescue per acre and 2 LBS per acre (.05 LBS/1000 SF) of Weeping Lovegrass.

For the period October 16 thru February 28, protect site by:

- Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring.
- Option (2) Use sod.
- Option (3) Seed with 60 LBS/acre (1.4 LBS/1000 SF) Kentucky 31 Tall Fescue and mulch with 2 tons per acre well-anchored straw.

Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed and fertilizer) on a firm, moist seedbed. Minimum seeding depth should be 1/4 inch on clayey soils and 1/2 inch on sandy soils, when using other than hydroseeder method of application. Note: If hydroseeding is used and the seed and fertilizer is mixed, they shall be mixed on site and the seeding shall be immediate without interruption.

Mulching: See Mulching Specification.

Irrigation:

If soil moisture is deficient, supply new seedlings with adequate water for plant growth until they are firmly established, if feasible. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

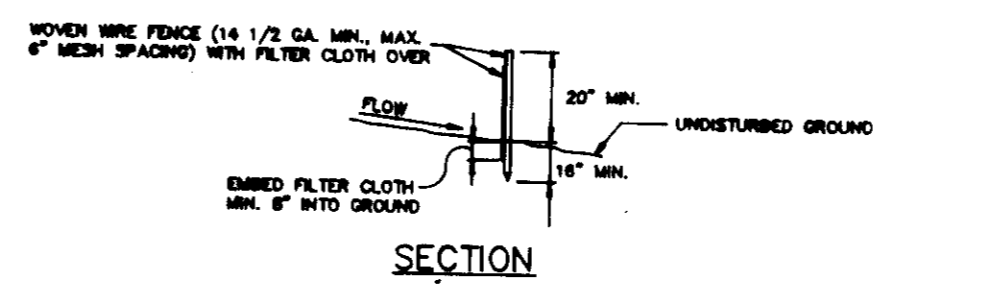
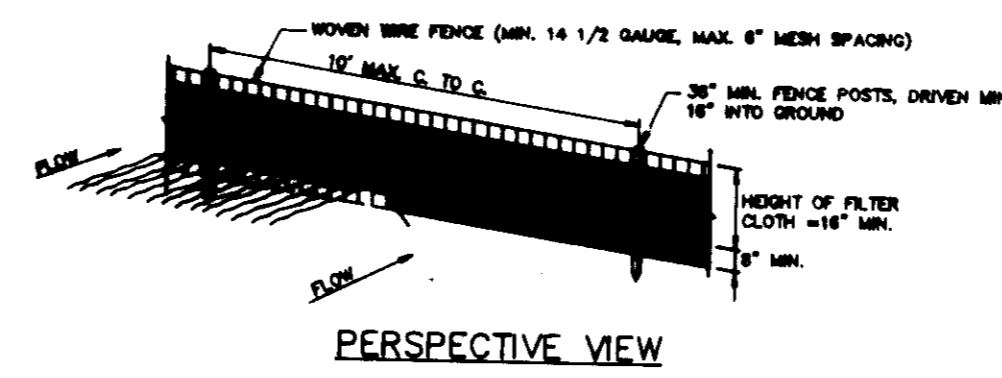
Maintenance:

Irrigation - If soil moisture becomes deficient, irrigate to prevent loss of stand of protective vegetation, if feasible.
Repairs - Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within the planting season, if possible.

- 1) If stand is inadequate for erosion control, overseed and fertilize using half of the rates originally applied.
- 2) If stand is over 60% damaged, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT
2. INSTALL SILT FENCE
3. CLEAR AND GRUB AREA OF CONSTRUCTION AND GRADE AREA FOR TOT LOT
4. INSTALL TOT LOT AND MAINTAIN POSITIVE DRAINAGE
5. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SILT FENCE AND STABILIZE IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened properly to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24\"/>
- 3. When the sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
- 4. Maintenance shall be performed as needed and material removed when "logs" develop in the silt fence.

POSTS: Steel, either 1 or 1 1/2 type or 2\"/>

SILT FENCE DETAIL
NO SCALE

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (915-1005).
2. All vegetative and structural practices are to be installed in accordance with the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around the perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area of Lot 100	2.584 acres
Area Disturbed	0.154 acres
Area to be roofed or paved	0.006 acres
Area to be vegetatively stabilized	0.128 acres
Total Cut	10 cu.yds.
Total Fill	10 cu.yds.
8. Any sediment control practices which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Department of Public Works Sediment Control Inspector.
10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
11. Sediment will be removed from traps when its depth reaches clean out elevation shown on the plans.
12. Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.

TEMPORARY SEEDING

Seedbed Preparation:

When the area to be seeded has been recently loosened to the extent that an adequate seedbed exists, no additional treatment is required. However, when the area to be seeded is packed, crusted, and hard, the top 3 inches of soil shall be loosened by disking, raking or other acceptable means before seeding.

Soil Amendments:

For temporary seedings, fertilizer shall be applied at the rate of 800 LBS per acre (15 LBS/1000 SF), using 10-10-10 or equivalent. Soils which are highly acid should be limed.

Seeding:

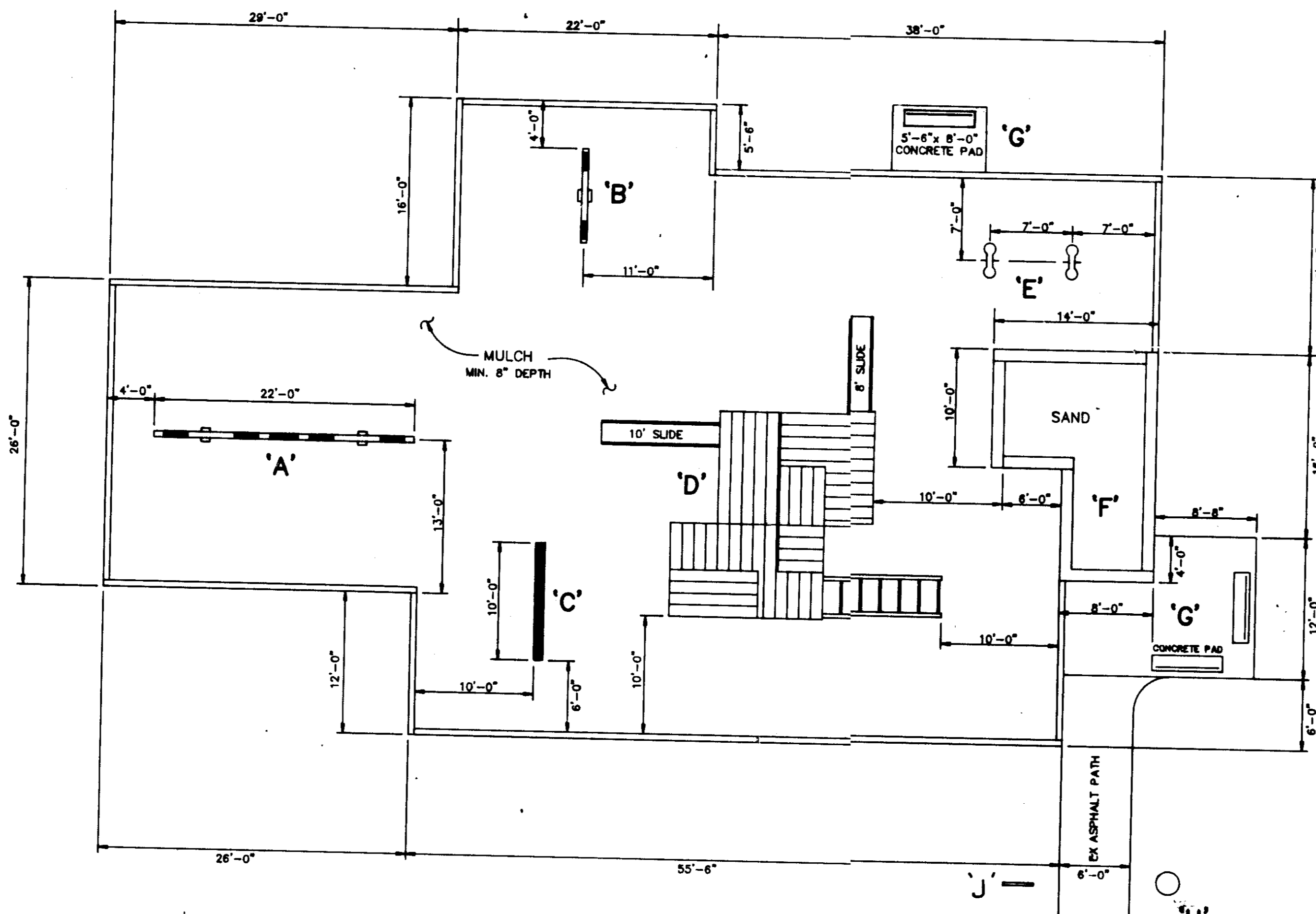
For periods March 1 thru April 30 and August 15 thru November 15. Seed with 2 1/2 BU per acre (3.2 LBS/1000 SF) of annual rye.

For the period May 1 thru August 14. Seed with 3 LBS per acre (.07 LBS/1000 SF) of Weeping Lovegrass.

For the period November 16 thru February 28, protect site by: Applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed and fertilizer).

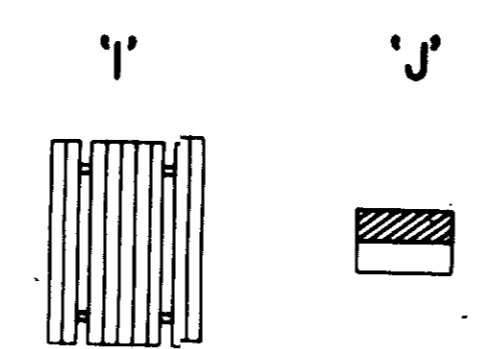
Mulching: See Mulching Specification.



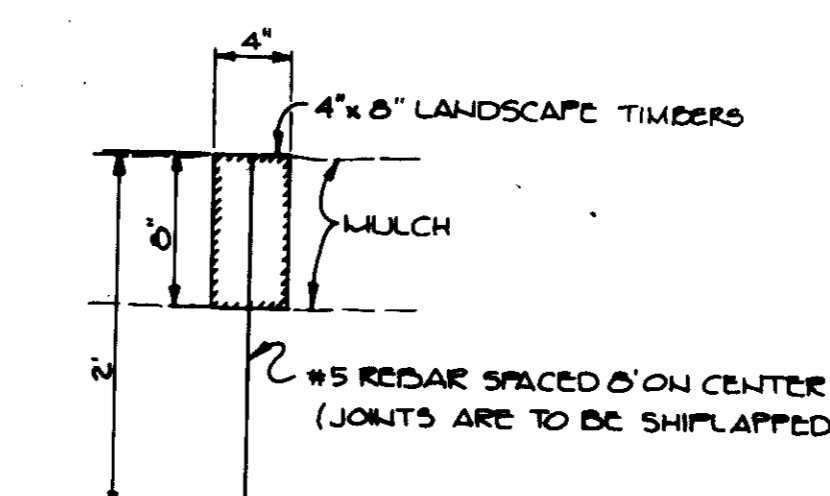
PLAN
SCALE: 1/8\"/>

EQUIPMENT:

- A DBL. T SWING (WITH 5 SWING SEATS)
- B T SWING (WITH 2 INFANT SWINGS)
- C BALANCE BEAM
- D FORT 700 (WITH 2 SLIDES)
- E (2) SPRING ANIMALS
- F SANDBOX
- G (3) PERMANENT BENCHES
- H TRASH CONTAINER
- I (2) PICNIC TABLES
- J BULLETIN BOARD



ACTUAL LOCATION OF PICNIC TABLES AND BULLETIN BOARD TO BE DETERMINED IN THE FIELD



EDGING DETAIL
NOT TO SCALE

AS BUILT CERTIFICATE	
DATE	DATE
BY THE DEVELOPER:	
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.	
DEVELOPER <i>Dennis Ellis</i>	DATE 5-26-93
BY THE ENGINEER:	
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.	
ENGINEER <i>Arthur E. Muegge</i>	DATE 6-1-93
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.	
<i>Jeanne M. Nelson/John</i>	DATE 7/3/93
S.S. SOIL CONSERVATION SERVICE	
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.	
<i>Arthur E. Muegge</i>	DATE 7/3/93
HOWARD SOIL CONSERVATION DISTRICT	
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>Jocelyn Ford</i>	DATE 8-25-93
COUNTY HEALTH OFFICER	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Dennis J. Drayton</i>	DATE 8/2/93
DIRECTOR	
<i>Anna Surinmani</i>	DATE 8/2/93
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	
<i>Oliver M. Tamm</i>	DATE 8/2/93
DIRECTOR	
<i>Elizabeth Anderson Calia</i>	DATE 8/2/93
CHIEF, BUREAU OF ENGINEERING	
DATE NO.	REVISION
OWNER / DEVELOPER	
COLUMBIA ASSOCIATION 10221 WINCOPIN CIRCLE COLUMBIA, MARYLAND 21044	
PROJECT PHEASANT RIDGE TOT LOT	
AREA	TAX MAP 35 VILLAGE OF RIVER HILL SECTION 1 AREA 3 PHASE 1 LOT 166 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE GRADING AND SEDIMENT CONTROL NOTES AND DETAILS	
RIEMER MUEGGE & ASSOCIATES, INC. Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 410-997-8900 FAX: 410-997-9282	
DATE 6-1-93	F-91-98, FOR PHASE 210 DESIGNED BY: D.B.S.
<i>Arthur E. Muegge</i>	DRAWN BY: D.B.S.
PROFESSIONAL ENGINEER	PROJECT NO: 89800
DATE 11 May 93	DATE: MARCH 19, 1993
	SCALE: AS SHOWN
	DRAWING NO. 2 OF 2

APPROVED
PLANNING AND ZONING
of HOWARD COUNTY
DATE 11 May 93